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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,304	07/03/2003	Albert Canton	29939/38584A	5410

4743 7590 12/21/2004

MARSHALL, GERSTEIN & BORUN LLP  
6300 SEARS TOWER  
233 S. WACKER DRIVE  
CHICAGO, IL 60606

EXAMINER
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BALSIS, SHAY L

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/613,304

Applicant(s)

CANTON ET AL.

Examiner

Shay L Balsis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 22-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/1/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of claims 1-18 in the reply filed on 11/26/04 is acknowledged.

### ***Specification***

The disclosure is objected to because of the following informalities:

Page 2, lines 22 states that the core has reference number 20 and the outer layer has reference number 22. Throughout the rest of the application, specifically pages 4-6, the reference numbers become switched. Correction is necessary so that the elements have the same corresponding reference numbers throughout the entire application.

Page 6, line 8 states that the multi-layer bristle is shown in Fig. 2 however it should be Fig. 3 since the multi-layer bristle is not shown in figure 2.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Weihrauch (DE 3400941).

Weihrauch teaches a bristle comprising an attachment end and a free end. The bristle is constructed from a core layer (3) of a first material and an outer layer surrounding the core layer (2) made of a second material. The first material is different from the second material. The core and the outer layer are circular in cross-section and concentric.

Claims 1-5, 7, 11, 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Fitjer (USPN 5161554).

Fitjer teaches a bristle comprising an attachment end and a free end. The bristle is constructed from a core layer (11) of a first material and an outer layer surrounding the core layer (10) made of a second material. The first material is different from the second material. The core and the outer layer are circular in cross-section and concentric. The first material is adapted to provide structural support for the bristle. The second material is a non-abrasive material. At least one of the first or second materials includes a recycled material. The second material is made from hydrophobic material to as to repel water from the bristle (col. 4, lines 35-36). There is a bristle support base (1), which holds a plurality of bristles. The bristles may be used in the form of a broom since it is the intended use of the invention and since there is no structural difference between the claimed invention and the reference, the limitation holds no patentable weight.

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Claims 1-5, 7, 9, 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Bond (USPN 4610925).

Bond teaches a bristle comprising an attachment end and a free end. The bristle is constructed from a core layer of a first material and an outer layer surrounding the core layer made of a second material (col. 1, lines 30-47). The first material is different from the second material. The core and the outer layer are circular in cross-section and concentric. The first material is adapted to provide structural support for the bristle. The second material is a non-abrasive material. At least one of the first or second materials includes a recycled material. The second material is made from hydrophobic material to as to repel water from the bristle. Additionally, the second material includes anti-electrostatic properties for repelling debris from the bristles. There is a bristle support base, which holds a plurality of bristles. The bristles may be used in the form of a broom since it is the intended use of the invention and since there is no structural difference between the claimed invention and the reference, the limitation holds no patentable weight.

Claims 1-5, 7, 11-18, 22-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Brezler, III (USPN 6311359).

Brezler teaches a bristle comprising an attachment end and a free end. The bristle is constructed from a core layer of a first material and an outer layer surrounding the core layer made of a second material (figure 4). The first material is different from the second material (col. 3, lines 40-45). The outer layer is flagged at the free end of the bristle (figure 5). The core and the outer layer are co-extruded to form a coaxial structure. The core and the outer layer are circular in cross-section and concentric. The first material is adapted to provide structural

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support for the bristle. The second material is a non-abrasive material. At least one of the first or second materials includes a recycled material. The second material is made from polypropylene, which is a hydrophobic material to as to repel water from the bristle. There is a bristle support base (4), which holds a plurality of bristles. The bristles may be used in the form of a broom since it is the intended use of the invention and since there is no structural difference between the claimed invention and the reference, the limitation holds no patentable weight. The base has a handle (2) extending in a direction opposite to a side of the base from which the bristles extend.

Claims 1-5, 7, 10, 12-18, 22-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Weihrauch (USPN 6772467) and Claims 1-5, 7, 10, 12-18, 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Weihrauch (WIPO 01/03544)

Weihrauch teaches a bristle comprising an attachment end and a free end. The bristle is constructed from a core layer of a first material (5) and an outer layer (7) surrounding the core layer made of a second material (figure 5a). The first material is different from the second material (col. 6, lines 1-15). The outer layer is flagged at the free end of the bristle (figure 5a). The core and the outer layer are co-extruded to form a coaxial structure. The core and the outer layer are circular in cross-section and concentric. The first material is adapted to provide structural support for the bristle. The second material is a non-abrasive material. At least one of the first or second materials includes a recycled material. The second material is made from polyamide, which is a hydrophilic material to as to absorb water onto the bristle. There is a bristle support base (col. 1, lines 1-15), which holds a plurality of bristles. The bristles may be used in the form of a broom since it is the intended use of the invention and since there is no

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structural difference between the claimed invention and the reference, the limitation holds no patentable weight.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cueman (USPN 6108847) in view of Fitjer ('554) or Cueman (USPN 6108847) in view of Brezler III ('359) or Cueman (USPN 6108847) in view of Weihrauch ('467) or Cueman (USPN 6108847) in view of Weihrauch (WO '544).

Fitjer, Brezler or Weihrauch teach all the essential elements of the claimed invention however the references all fail to teach that the second material is made from an antimicrobial material. Cueman teaches a brush that comprises antimicrobial material embedded in the bristles. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an antimicrobial material or chemical in the bristles of Fitjer, Brezler or Weihrauch to inhibit bacterial growth on the bristles and the brush. Additionally, an antimicrobial material would help to keep the bristles and brush bacterial free so that when in use, the bacterial does not spread to the area being cleaned.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isao (USPN 4305173) in view of Brezler III ('359).

Brezler teaches all the essential elements of the claimed invention however the reference fails to teach that the second material includes electrostatic properties for attracting debris onto the bristle. Isao teaches a brush that comprises bristles that are electrostatically charged. Isao teaches that polypropylene bristles generate static electricity better than any other synthetic resin material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to electrostatically charge the bristles of Brezler so as to allow the bristles to thoroughly clean up dust and dirt. The dust and dirt will be attracted to the bristles so that cleaning is made easier. Brezler's bristles are made of polypropylene, which is the ideal material for making the bristles electrostatically charged.

### ***Conclusion***

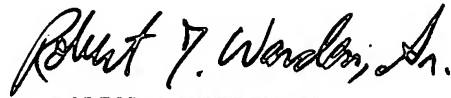
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 571-272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Slb  
12/14/04



ROBERT J. WARDEN, SR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700